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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,525	02/18/2004	Floyd Backes	160-053	2448

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McGUINNESS & MANARAS LLP
125 NAGOG PARK
ACTON, MA 01720

EXAMINER	
PHILPOTT, JUSTIN M	

ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 07/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/781,525	BACKES ET AL.	
	Examiner	Art Unit	
	Justin M. Philpott	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 June 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 15, 2006 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1and 6 have been considered but are moot in view of the new ground(s) of rejection. Specifically, the newly added claim limitations are taught by the newly cited reference of Kimura as discussed in the following office action.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent Application Publication No. US 2001/0048744 A1 by Kimura.

Regarding claim 1, Kimura teaches a method for use by an access point in a wireless communications environment including multiple access points and stations (e.g., see FIGS. 2, 3 and 5 and paragraphs 0029-0058 regarding access point and station communication methods), wherein stations gain network access by associating with one or more of the access points, comprising the steps of: collecting bid messages from stations (e.g., receiving authentication request message, see paragraphs 0038; see also paragraphs 0035 regarding a plurality of mobile stations MT1-MT4 completing or already completed the association steps), each bid message (e.g., association request message) being a request from one station (e.g., MT1) to associate with the access point (e.g., see FIGS. 2, 3 and 5 regarding access point) and including at least one parameter (e.g., see paragraph 0039 regarding "using the Initialization Vector and Secret Key values as the parameters" and see paragraph 0050 regarding "Shared Secret Data and Initialization Vector as the parameters"); selecting only a subset of the bid messages based at least in-part on the at least one parameter (see paragraphs 0049-0053 and step S34 of FIG. 4 regarding issuing a rejection message for the messages that do not pass the authentication/ association requirements, whereby only those messages passing the authentication/association requirements would then be selected by way of step S33 in FIG. 4); and causing each station which submitted a selected bid message to become associated with the access point (e.g., see paragraphs 0041-0045 regarding "send[ing] an authentication response message 2 indicating the authorized authentication to the mobile station MT1"), each of the steps being executed by the access point (e.g., see paragraph 0042 regarding "authentication/association processing means 13 in the access point device").

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 2, 3, 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura in view of U.S. Patent App. Publication No. US 2004/0054767 A1 by Karaoguz et al.

Regarding claim 2, Kimura teaches the method discussed above regarding claim 1, however, may not specifically disclose the at least one parameter includes distance from the access point.

Karaoguz, like Kimura, also teaches a method for use by an access point (e.g., access points 410a-n, see FIG. 4) in a wireless communications environment including multiple access points (e.g., access points 410a-n in FIG. 4) and stations (e.g., wireless devices 415a-n), wherein stations gain network access by associating with one or more of the access points (e.g., see paragraph 0021). Additionally, Karaoguz teaches bid messages (e.g., comprising location and identity information) comprising a request from one station to associate with the access point (e.g., see paragraphs 0033-0036 wherein the wireless device establishes communication with the access point) include at least one parameter (e.g., see paragraph 0033 regarding range message comprising location information indicating the distance range; see also paragraph 0041-0042 regarding location information). More specifically, Karaoguz teaches the at least one parameter includes a distance from the access point (e.g., see paragraph 0033 regarding range message comprising location information indicating the distance range; see also paragraph 0041-0042

regarding location information). Further, the teachings of Karaoguz provide access point/mobile station communications that with "optimized configuration" for increased efficiency and reduced costs (see paragraphs 0006-0009). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the access point/mobile station communication method teachings of Karaoguz to the access point/mobile station communication method of Kimura in order to provide "optimized configuration" for increased efficiency and reduced costs (see Karaoguz at paragraphs 0006-0009).

Regarding claim 3, Karaoguz teaches a selecting step is also based at least in-part on the number of stations associated with the access point (e.g., inherently represented by the identity information of each wireless device associated with the access point, see paragraph 0024). As discussed above, the teachings of Karaoguz provide access point/mobile station communications that with "optimized configuration" for increased efficiency and reduced costs (see paragraphs 0006-0009). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the access point/mobile station communication method teachings of Karaoguz to the access point/mobile station communication method of Kimura in order to provide "optimized configuration" for increased efficiency and reduced costs (see Karaoguz at paragraphs 0006-0009).

Regarding claim 5, while Karaoguz may not specifically disclose sending an accept message for causing association between the station and access point only if a maximum number of associations has not been exceeded, Karaoguz further teaches network optimization is performed (e.g., see paragraphs 0027-0028 and 0045), wherein it is implicit that the number of permissible associations in the network cannot be exceeded. Thus, at the time of the invention it

would have been obvious to one of ordinary skill in the art to send an accept message only if a maximum number of associations has not been exceeded, since Karaoguz further teaches network optimization is performed (e.g., see paragraphs 0027-0028 and 0045) and it is implicit that the number of permissible associations in the network cannot be exceeded. Additionally, as discussed above, the teachings of Karaoguz provide access point/mobile station communications that with "optimized configuration" for increased efficiency and reduced costs (see paragraphs 0006-0009). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the access point/mobile station communication method teachings of Karaoguz to the access point/mobile station communication method of Kimura in order to provide "optimized configuration" for increased efficiency and reduced costs (see Karaoguz at paragraphs 0006-0009).

Regarding claim 6, Kimura teaches the method discussed above regarding claim 1, and Kimura in view of Karaoguz teach the method discussed above regarding claims 2 and 3. Additionally, Karaoguz teaches keeping track of the collected parameters related to stations in the network (e.g., gathering and storing statistical information such as location and identity information of the wireless devices 120-120n, power levels, channel cycling, frequencies, coverage area, traffic patterns, etc., see paragraph 0024). As discussed above, the teachings of Karaoguz provide access point/mobile station communications that with "optimized configuration" for increased efficiency and reduced costs (see paragraphs 0006-0009). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the access point/mobile station communication method teachings of Karaoguz to the access point/mobile station communication method of Kimura in order to provide "optimized

configuration" for increased efficiency and reduced costs (see Karaoguz at paragraphs 0006-0009).

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura in view of U.S. Patent No. 6,266,537 to Kashitani et al.

Regarding claim 4, Kimura teaches the method discussed above regarding claim 1, however, may not specifically disclose selecting the bid message from the closest station in terms of distance.

Kashitani, like Kimura, also teaches a method for associating stations and access points, and specifically, discloses associating occurs when the parameter received indicates the closest distance (e.g., see col. 7, lines 23-32 – col. 8, line 58 regarding polling response signals responding to long-distance ranges or short-distance ranges). Additionally, the teachings of Kashitani provide reduced interference and increased reliability for wireless transmissions (e.g., see col. 3, line 47 – col. 4, line 26). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the teachings of Kashitani to the method of Kimura in order to provide reduced interference and increased reliability for wireless transmissions (e.g., see Kashitani at col. 3, line 47 – col. 4, line 26).

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin M. Philpott whose telephone number is 571.272.3162. The examiner can normally be reached on M-F, 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571.272.3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Justin M. Philpott